NNDSS Modernization Initiative Technical Assistance Coordination Team Update

December 19, 2014

Colleagues,

Please find below the National Notifiable Diseases Surveillance System (NNDSS) Modernization Initiative (NMI) Technical Assistance (TA) Coordination Team Update for December 19, 2014. These email updates are a collaboration among the Centers for Disease Control and Prevention (CDC), Council of State and Territorial Epidemiologists (CSTE), and the Association of Public Health Laboratories (APHL) and will be sent biweekly in an effort to keep reporting jurisdictions and other partners and stakeholders updated on the progress of NMI.

Please note that the next issue of the NMI Technical Assistance Coordination Team Update will be on Friday, January 16, 2015. For more information on NMI, please see the NMI FAQS at http://www.cdc.gov/nmi/faq.html. If you have questions not answered in the FAQs, please send them to edx@cdc.gov.

Message Mapping Guide Development Updates

- Message Mapping Guide (MMG) Status Updates:
 - CDC has formed an MMG standardization workgroup to address the issue of incorporating common laboratory and vaccine data elements in the HL7 messages for the priority MMGs. Topics under discussion include:
 - revising the current message structure specification; opening currently restricted fields and segments;
 - categorizing all Office of Management and Budget (OMB)-approved data elements into themes;
 - using a consistent lab structure for laboratory data to allow transmission of lab findings from electronic laboratory reporting (ELR), hand-entry, or "epi questions"; and
 - using a consistent vaccine structure.
 - The MMG Development Team completed CDC clearance of the "Methods for Conveying Unknown or Missing Values in Case Notification Messages" instructions, updated with new implementation guidelines for HL7 mapping of indicator values as "virtual" indicators instead of "literal" indicators.
 - CDC e-mailed the document to CSTE, APHL, and HL7 and National Electronic Disease Surveillance System Base System (NBS) users within all jurisdictions to initiate the 2-week external review process from December 10–24, 2014.
 - The proposed next steps include the following:
 - The document will be posted on the <u>Draft MMG Web site</u> at the end of the external review.
 - Within 3 weeks of the end of the review period, the MMG Development Team will reconcile the feedback, incorporate the indicators into the MMGs, and post the revised MMGs on the Draft MMG Web site.

Mumps and Pertussis MMGs (Stage I—Draft Phase):

- The MMG Development Team is revising the Mumps and Pertussis MMGs according to the request from the CDC National Center for Immunization and Respiratory Diseases (NCIRD) for indicators for unknown values for selected date/numeric data elements in the MMGs.
- The MMG Development Team will post the revised MMGs for a second external review period of 6 weeks after close of the review period for the "Methods for Conveying Unknown or Missing Values in Case Notification Messages" document.
- During the external review period, the CDC Message Validation, Processing, and Provisioning System (MVPS) Team will develop draft internal data provisioning requirements.

Congenital Syphilis and STD MMGs (<u>Stage II—Reconciled Draft Phase</u>)

- The MMG Development Team is incorporating the CDC STD Program's requests to add indicator values for selected date/numeric data elements and one expanded value set for a coded data element through additional implementation notes to describe the HL7 mapping guidelines for identifying unknown or missing values.
 - The MMG Development Team submitted reconciled versions of the STD test scenario and STD test messages for the current pilot with Michigan.
 - These versions of the artifacts do not include additional program requirements, such as unknown indicators/values and implementation notes.
- The MMG Development Team has revised the Congenital Syphilis MMG to identify the infant as the focus of the case investigation rather than the mother and to address the addition of indicator elements.
- The MMG Development Team will revise and post the STD and Congenital Syphilis MMGs as soon as possible as <u>Stage III</u>—<u>Pilot Test-ready Draft Phase</u> versions of the MMGs, along with their artifacts. As the MMGs are updated, the MMG Development Team will provide them to the MVPS Team for implementation purposes.

Generic v2 and Hepatitis MMGs (Stage III—Pilot Test-ready Draft Phase)

- CDC program requests for indicator values will affect the Generic v2 MMG but NOT the Hepatitis MMG.
- The MMG Development Team has revised the Generic v2 test scenarios due to minor inconsistencies and will create new test messages from the revised test scenarios.
- The MMG Development Team also is revising the Hepatitis test scenarios and test messages.
- The MMG Development Team will post updated versions of the Generic v2 and Hepatitis artifacts to the Draft MMG Web site as soon as possible.
- No guides are in <u>Stage IV—Final MMG Phase</u> at this time.

Message Validation, Processing, and Provisioning System Updates

- The CDC Message Evaluation and Testing Service (METS) tool received its authorization to operate from CDC on 11/19/2014 and went into production on 12/4/2014.
 - METS will serve as a common message validation service to assist jurisdictions in preparing and sending messages to CDC as defined by the applicable messaging, vocabulary, and programmatic standards.
 - Specifically, METS allows jurisdictions to evaluate their test messages as they develop their systems to send messages to CDC, ensuring that their systems are generating messages that conform to the proper message type structure, business rules, and content.
 - The METS tool is available at https://mets.cdc.gov.
- The MVPS Team continues to work with CSTE and APHL to facilitate beta testing with Michigan, which is currently in progress.
- The MVPS Team has developed and provided data provisioning requirements to AgileX for Generic v2, Hepatitis, STD, and Congenital Syphilis. Following is the status of specific requirements provided to AgileX:
 - o Generic v2:
 - The MVPS Team received the software build for Generic v2 from AgileX on the scheduled date of 8/29/2014.
 - o Hepatitis:
 - The MVPS Team received the software build for Hepatitis from AgileX on the scheduled date of 9/26/2014.
 - o STD:
 - The MVPS team received the software build from AgileX on 10/17/2014.
 - The NMI TA Coordination Team will work with Michigan to develop to the STD MMG when the guide reaches <u>Stage III—Pilot Test-ready Draft Phase</u>. As a result, testing of STD is expected to occur in 2015.
 - Congenital Syphilis:
 - The MVPS team is defining a new date for the software build to be provided by AgileX due to changes in the Congenital Syphilis MMG.
 - Mumps and Pertussis:
 - The MVPS team will not define dates for MVPS activities related to Mumps and Pertussis until those MMGs are finalized and posted for external partner review.
 - The MMGs for Mumps and Pertussis have been redeveloped and will go through external partner review for a second time.
 - The MVPS team will then develop technical requirements and support software development.

Technical Assistance Updates

- Michigan Pilot Updates:
 - NMI Technical Assistance Coordination Team representatives from APHL and the MVPS
 Team continue to work virtually with Michigan.
 - Michigan completed the first stage of end-to-end testing with Hepatitis test messages sent on 12/4/2014. All test messages were received via the Public Health Information Network Messaging Service (PHINMS) and successfully processed by MVPS.

- The NMI TA Coordination Team began the gap analysis with Michigan for STDs the week of 12/15/2014.
- The NMI TA Coordination Team expects to begin gap analysis work for Hepatitis with Oregon and New York before the end of December 2014.
- Jurisdictions selected for pilot testing of the test-ready versions of MMGs should wait until they
 are contacted by the NMI TA Coordination Team before using the test-ready MMGs and
 submitting test messages to CDC. All other jurisdictions should not plan to submit data to CDC
 until the final MMGs have been posted to the PHIN Web site.
- For more information about technical assistance:
 - Please see the NMI FAQs at http://www.cdc.gov/nmi/faq.html.
 - For pilot jurisdictions: If you have questions specific to NMI TA, please contact Laura Carlton, contractor to APHL, at lcarlton@TSJG.com.
 - For non-pilot jurisdictions: If you have questions or would like to request TA for MMG implementation through the Epidemiology and Laboratory Capacity for Infectious Diseases (ELC) Cooperative Agreement, please email edx@cdc.gov.

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